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## FEDERAL BORROWING AND DEBT

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### 13. FEDERAL BORROWING AND DEBT

Debt is the largest legally binding obligation of the Federal Government. At the end of 2001, the Government owed \$3,320 billion of principal to the people who had loaned it the money to pay for past deficits. During that year, the Government paid the public around \$215 billion of interest on this debt.

After many years of deficits financed mainly by borrowing from the public, the Government had unified budget surpluses in the past four years. As a result, it reversed the long period of debt accumulation and repaid \$453 billion of publicly held debt, \$90 billion of it in 2001. During 2001 and 2002, however, the recession

and the response to the terrorist attacks have decreased receipts and increased outlays. The budget therefore estimates a deficit in 2002 and 2003, with a return to surplus in 2004 or 2005. Even though debt held by the public will temporarily increase, it is estimated to continue falling as a percentage of the gross domestic product (GDP) after 2002.

#### Trends in Debt Since World War II

Table 13-1 depicts trends in Federal debt held by the public from World War II to the present and estimates from the present to 2007. (It is supplemented for earlier years by tables 7.1-7.3 in *Historical Tables*,

**Table 13-1. TRENDS IN FEDERAL DEBT HELD BY THE PUBLIC**

(Dollar amounts in billions)

| Fiscal year         | Debt held by the public |                              | Debt held by the public as a percent of: |                                 | Interest on the debt held by the public as a percent of: <sup>3</sup> |     |
|---------------------|-------------------------|------------------------------|--|---------------------------------|---|-----|
|                     | Current dollars         | FY 1996 dollars <sup>1</sup> | GDP                                      | Credit market debt <sup>2</sup> | Total outlays   | GDP |
| 1946 .....          | 241.9                   | 1,728.3                      | 108.6                                    | N/A                             | 7.4   | 1.8 |
| 1950 .....          | 219.0                   | 1,270.7                      | 80.1                                     | 53.3                            | 11.4  | 1.8 |
| 1955 .....          | 226.6                   | 1,154.9                      | 57.3                                     | 43.2                            | 7.6   | 1.3 |
| 1960 .....          | 236.8                   | 1,070.7                      | 45.6                                     | 33.8                            | 8.5   | 1.5 |
| 1965 .....          | 260.8                   | 1,102.4                      | 37.9                                     | 26.9                            | 8.1   | 1.4 |
| 1970 .....          | 283.2                   | 994.2                        | 28.0                                     | 20.8                            | 7.9   | 1.5 |
| 1975 .....          | 394.7                   | 1,020.6                      | 25.3                                     | 18.4                            | 7.5   | 1.6 |
| 1980 .....          | 711.9                   | 1,271.6                      | 26.1                                     | 18.5                            | 10.6  | 2.3 |
| 1985 .....          | 1,507.4                 | 2,051.0                      | 36.4                                     | 22.3                            | 16.2  | 3.7 |
| 1986 .....          | 1,740.8                 | 2,313.1                      | 39.5                                     | 22.6                            | 16.1  | 3.6 |
| 1987 .....          | 1,889.9                 | 2,444.1                      | 40.7                                     | 22.3                            | 16.0  | 3.5 |
| 1988 .....          | 2,051.8                 | 2,569.3                      | 40.9                                     | 22.2                            | 16.2  | 3.4 |
| 1989 .....          | 2,191.0                 | 2,641.9                      | 40.5                                     | 22.0                            | 16.5  | 3.5 |
| 1990 .....          | 2,411.8                 | 2,803.0                      | 42.1                                     | 22.6                            | 16.2  | 3.5 |
| 1991 .....          | 2,689.3                 | 3,008.3                      | 45.3                                     | 24.1                            | 16.2  | 3.6 |
| 1992 .....          | 3,000.1                 | 3,270.0                      | 48.2                                     | 25.7                            | 15.5  | 3.4 |
| 1993 .....          | 3,248.8                 | 3,458.8                      | 49.5                                     | 26.6                            | 14.9  | 3.2 |
| 1994 .....          | 3,433.4                 | 3,577.9                      | 49.4                                     | 26.8                            | 14.4  | 3.0 |
| 1995 .....          | 3,604.8                 | 3,676.8                      | 49.2                                     | 26.7                            | 15.8  | 3.3 |
| 1996 .....          | 3,734.5                 | 3,734.5                      | 48.5                                     | 26.2                            | 15.8  | 3.2 |
| 1997 .....          | 3,772.8                 | 3,700.6                      | 46.1                                     | 25.2                            | 15.7  | 3.1 |
| 1998 .....          | 3,721.6                 | 3,599.6                      | 43.0                                     | 23.3                            | 15.1  | 2.9 |
| 1999 .....          | 3,632.9                 | 3,468.5                      | 39.8                                     | 21.3                            | 13.8  | 2.6 |
| 2000 .....          | 3,410.1                 | 3,190.0                      | 35.0                                     | 18.9                            | 13.0  | 2.4 |
| 2001 .....          | 3,320.0                 | 3,035.6                      | 32.7                                     | 17.4                            | 11.6  | 2.1 |
| 2002 estimate ..... | 3,477.5                 | 3,111.3                      | 33.6                                     | N/A                             | 9.1   | 1.8 |
| 2003 estimate ..... | 3,570.3                 | 3,137.9                      | 32.7                                     | N/A                             | 9.0   | 1.8 |
| 2004 estimate ..... | 3,599.6                 | 3,110.6                      | 31.2                                     | N/A                             | 9.3   | 1.8 |
| 2005 estimate ..... | 3,547.7                 | 3,011.6                      | 29.2                                     | N/A                             | 9.1   | 1.7 |
| 2006 estimate ..... | 3,470.0                 | 2,890.7                      | 27.1                                     | N/A                             | 8.8   | 1.6 |
| 2007 estimate ..... | 3,378.9                 | 2,762.3                      | 25.1                                     | N/A                             | 8.4   | 1.5 |

N/A = Not Available.

<sup>1</sup> Debt in current dollars deflated by the GDP chain-type price index with fiscal year 1996 equal to 100.

<sup>2</sup> Total credit market debt owed by domestic nonfinancial sectors, modified in some years to be consistent with budget concepts for the measurement of Federal debt. Financial sectors are omitted to avoid double counting, since financial intermediaries borrow in the credit market primarily in order to finance lending in the credit market. Source: Federal Reserve Board flow of funds accounts. Projections are not available.

<sup>3</sup> Interest on debt held by the public is estimated as the interest on Treasury debt securities less the "interest received by trust funds" (subfunction 901 less subfunctions 902 and 903). The estimate of interest on debt held by the public does not include the comparatively small amount of interest paid on agency debt or the offsets for interest on Treasury debt received by other Government accounts (revolving funds and special funds).

which is published as a separate volume of the budget.) As this table shows, Federal debt peaked at 108.6 percent of GDP in 1946, just after the end of the war. From then until the 1970s, Federal debt grew gradually, but, due to inflation, it declined in real terms. Because of an expanding economy as well as inflation, Federal debt as a percentage of GDP decreased almost every year. With households borrowing large amounts to buy homes and consumer durables, and with businesses borrowing large amounts to buy plant and equipment, Federal debt also decreased almost every year as a percentage of the total credit market debt outstanding. The cumulative effect was impressive. From 1950 to 1975, debt held by the public declined from 80.1 percent of GDP to 25.3 percent, and from 53.3 percent of credit market debt to 18.4 percent. Despite rising interest rates, interest outlays became a smaller share of the budget and were roughly stable as a percentage of GDP.

During the 1970s, large budget deficits emerged as the economy was disrupted by oil shocks and inflation. The nominal amount of Federal debt more than doubled, and Federal debt relative to GDP and credit market debt stopped declining after the middle of the decade. The growth of Federal debt accelerated in the 1980s, and the ratio of Federal debt to GDP grew sharply. The ratio of Federal debt to credit market debt also rose, though to a much lesser extent. Interest outlays on debt held by the public, calculated as a percentage of either total Federal outlays or GDP, increased as well.

The growth of Federal debt held by the public was decelerating by the mid-1990s, however, and the debt has declined markedly relative to both GDP and total credit market debt. It fell from 49.5 percent of GDP in 1993 to 32.7 percent in 2001; and it fell more unevenly from 26.6 percent of total credit market debt in 1993 to 17.4 percent in 2001. Interest on this debt, relative to total outlays and GDP, has been declining as well. Interest as a share of outlays peaked at 16.5 percent in 1989 and then fell to 11.6 percent by 2001. Interest as a percentage of GDP has fallen in a similar proportion.

The current recession and response to the terrorist attacks have temporarily interrupted the downward trend in debt. The recession reduced tax receipts, and spending increased for war and homeland needs. The Government is estimated to have a deficit in 2002 but to return to surplus by 2005. As a result, table 13-1 shows a rise in publicly held debt for three years. Even during this period, however, debt as a percentage of GDP is estimated to increase only in 2002. By 2007, debt as a percentage of GDP is estimated to fall to 25.1 percent, significantly below the level in 2001 and the lowest level since the mid-1970s. Interest as a percentage of outlays is estimated to fall to 8.4 percent, also well below the level in 2001.

### Debt Held by the Public, Gross Federal Debt, and Liabilities Other Than Debt

The Federal Government issues debt securities for two principal purposes. First, it borrows from the public to finance the Federal deficit.<sup>1</sup> Second, it issues debt to Government accounts, primarily trust funds, that accumulate surpluses. By law, trust fund surpluses must generally be invested in Federal securities. The gross Federal debt is defined to consist of both the debt held by the public and the debt held by Government accounts. Nearly all the Federal debt has been issued by the Treasury and is sometimes called “public debt,” but a small portion has been issued by other Government agencies and is called “agency debt.”<sup>2</sup>

Borrowing from the public, whether by the Treasury or by some other Federal agency, has a significant impact on the economy. Borrowing from the public is normally a good approximation of the Federal demand on credit markets. Even if the proceeds are used productively for tangible or intangible investment, the Federal demand on credit markets has to be financed out of the saving of households and businesses, the State and local sector, or the rest of the world. Federal borrowing thereby competes with the borrowing of other sectors for financial resources in the credit market, and tends to increase interest rates and reduce private capital accumulation. Borrowing from the public thus affects the size and composition of assets held by the private sector and the perceived wealth of the public. It also increases the amount of taxes required to pay interest to the public on Federal debt. Borrowing from the public is therefore an important concern of Federal fiscal policy.<sup>3</sup>

Issuing debt securities to Government accounts performs an essential function in accounting for the operation of these funds. The balances of debt represent the cumulative surpluses of these funds due to the excess of their tax receipts, interest receipts, and other collections compared to their spending. The interest on the debt compensates these funds—and the members of the public who pay earmarked taxes or user fees into these funds—for spending some of the funds’ collec-

<sup>1</sup>Debt held by the public was measured until 1988 as the par value (or face value) of the security, which is the principal amount due at maturity. (The only exception was savings bonds.) However, most Treasury securities are sold at a discount from par, and some are sold at a premium. Treasury debt held by the public is now measured as the sales price plus the amortized discount (or less the amortized premium). At the time of sale, the value equals the sales price. Subsequently, the value equals the sales price plus the amount of the discount that has been amortized up to that time. In equivalent terms, the measured value of the debt equals par less the unamortized discount. (For a security sold at a premium, the definition is symmetrical.) When the measurement was changed, the data in *Historical Tables* were revised as far back as feasible, which was 1956. Agency debt, except for zero-coupon certificates, is recorded at par. For further analysis of these concepts, see Special Analysis E, “Borrowing and Debt,” in *Special Analyses, Budget of the United States Government, Fiscal Year 1990*, pages E-5 to E-8, although some of the practices it describes have been revised. In 1997 Treasury began to sell inflation-indexed notes and bonds. The recorded value of these securities includes a periodic adjustment for inflation.

<sup>2</sup>The term “agency debt” is defined more narrowly in the budget than customarily in the securities market, where it includes not only the debt of the Federal agencies listed in table 13-3 but also the debt of the Government-sponsored enterprises listed in table 9-11 at the end of chapter 9 and certain Government-guaranteed securities.

<sup>3</sup>The Federal sector of the national income and product accounts provides a measure of the current surplus or deficit that can be used to analyze the effect of Federal fiscal policy on national saving within the framework of an integrated set of measures of aggregate U.S. economic activity. The Federal sector and its differences from the budget are discussed in chapter 17 of this volume, “National Income and Product Accounts.” Also see chapter 7 of this volume, Part III, the section on the analysis of saving and investment.

Table 13-2. FEDERAL GOVERNMENT FINANCING AND DEBT

(In billions of dollars)

|   | Actual<br>2001 | Estimate |         |         |         |         |         |
|---|----------------|----------|---------|---------|---------|---------|---------|
|   |                | 2002     | 2003    | 2004    | 2005    | 2006    | 2007    |
| <b>Financing:</b>   |                |          |         |         |         |         |         |
| Unified budget surplus (+)/ deficit (-) .....   | 127.1          | -106.2   | -80.2   | -13.7   | 61.1    | 86.2    | 104.0   |
| Financing other than the change in debt held by the public:   |                |          |         |         |         |         |         |
| Premiums paid (-) on buybacks of Treasury securities <sup>1</sup> .....   | -10.7          | -2.8     | .....   | .....   | .....   | .....   | .....   |
| Net purchases (-) of non-Federal securities by the National Railroad Retirement Investment Trust .....          | .....          | -15.4    | -0.9    | -*      | *       | 0.2     | 0.3     |
| Changes in: <sup>2</sup>  |                |          |         |         |         |         |         |
| Treasury operating cash balance .....   | 8.4            | -15.8    | .....   | -5.0    | .....   | .....   | -5.0    |
| Checks outstanding, deposit funds, etc. <sup>3</sup> .....  | -12.7          | -1.4     | -0.5    | .....   | .....   | .....   | .....   |
| Seigniorage on coins .....  | 1.3            | 0.9      | 1.1     | 1.2     | 1.2     | 1.2     | 1.2     |
| Less: Net financing disbursements:  |                |          |         |         |         |         |         |
| Direct loan financing accounts .....  | -19.1          | -15.3    | -15.4   | -14.5   | -14.7   | -14.9   | -14.7   |
| Guaranteed loan financing accounts .....  | -4.2           | -1.6     | 3.0     | 2.8     | 4.3     | 5.0     | 5.4     |
| Total, financing other than the change in debt held by the public .....   | -37.0          | -51.3    | -12.6   | -15.6   | -9.2    | -8.5    | -12.9   |
| Total, amount available to repay debt held by the public .....  | 90.1           | -157.5   | -92.8   | -29.4   | 52.0    | 77.7    | 91.1    |
| Change in debt held by the public .....   | -90.1          | 157.5    | 92.8    | 29.4    | -52.0   | -77.7   | -91.1   |
| <b>Debt Subject to Statutory Limitation, End of Year:</b>   |                |          |         |         |         |         |         |
| Debt issued by Treasury .....   | 5,743.2        | 6,109.9  | 6,499.4 | 6,866.8 | 7,182.3 | 7,481.9 | 7,780.2 |
| Adjustment for Treasury debt not subject to limitation and agency debt subject to limitation <sup>4</sup> ..... | -15.3          | -15.3    | -15.3   | -15.3   | -15.3   | -15.3   | -15.3   |
| Adjustment for discount and premium <sup>5</sup> .....  | 4.9            | 4.9      | 4.9     | 4.9     | 4.9     | 4.9     | 4.9     |
| Total, debt subject to statutory limitation <sup>6</sup> .....  | 5,732.8        | 6,099.5  | 6,489.0 | 6,856.4 | 7,171.9 | 7,471.5 | 7,769.8 |
| <b>Debt Outstanding, End of Year:</b>   |                |          |         |         |         |         |         |
| Gross Federal debt: <sup>7</sup>  |                |          |         |         |         |         |         |
| Debt issued by Treasury .....   | 5,743.2        | 6,109.9  | 6,499.4 | 6,866.8 | 7,182.3 | 7,481.9 | 7,780.2 |
| Debt issued by other agencies .....   | 27.0           | 27.2     | 26.5    | 25.7    | 24.6    | 23.9    | 23.1    |
| Total, gross Federal debt .....   | 5,770.3        | 6,137.1  | 6,525.9 | 6,892.5 | 7,206.9 | 7,505.8 | 7,803.3 |
| Held by:  |                |          |         |         |         |         |         |
| Debt securities held by Government accounts .....   | 2,450.3        | 2,659.6  | 2,955.6 | 3,292.9 | 3,659.2 | 4,035.8 | 4,424.4 |
| Debt securities held by the public <sup>8</sup> .....   | 3,320.0        | 3,477.5  | 3,570.3 | 3,599.6 | 3,547.7 | 3,470.0 | 3,378.9 |

\* \$50 million or less.

<sup>1</sup> Includes only premiums paid on buybacks through December 2001. Estimates are not made for subsequent buybacks.<sup>2</sup> A decrease in the Treasury operating cash balance (which is an asset) would be a means of financing a deficit and therefore has a positive sign. An increase in checks outstanding or deposit fund balances (which are liabilities) would also be a means of financing a deficit and therefore would also have a positive sign.<sup>3</sup> Besides checks outstanding and deposit funds, includes accrued interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and, as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on sale of gold.<sup>4</sup> Consists primarily of Federal Financing Bank debt.<sup>5</sup> Consists of unamortized discount (less premium) on public issues of Treasury notes and bonds (other than zero-coupon bonds) and unrealized discount on Government account series securities.<sup>6</sup> The statutory debt limit is \$5,950 billion.<sup>7</sup> Treasury securities held by the public and zero-coupon bonds held by Government accounts are almost all measured at sales price plus amortized discount or less amortized premium. Agency debt securities are almost all measured at face value. Treasury securities in the Government account series are measured at face value less unrealized discount (if any).<sup>8</sup> At the end of 2001, the Federal Reserve Banks held \$534.1 billion of Federal securities and the rest of the public held \$2,785.9 billion. Debt held by the Federal Reserve Banks is not estimated for future years.

tions at a later time than when they receive the money. The debt securities are a liability of the general fund to the fund that holds the securities and are a mechanism for that fund to accumulate interest on its balances. These invested balances provide the fund with authority to draw upon the U.S. Treasury in later years to make future payments on its behalf to the public. Public policy may deliberately run surpluses and accumulate debt in trust funds and other Government accounts in anticipation of future spending.

However, issuing debt to Government accounts does not have any of the economic effects of borrowing from the public. It is an internal transaction of the Government, made between two accounts that are both within the Government itself. It is not a current transaction of the Government with the public; it does not draw upon private saving and compete with the private sec-

tor for available funds in the credit market; it does not provide the account with resources other than a legal claim on the U.S. Treasury, which itself obtains real resources by taxation and borrowing; its interest does not have to be financed by taxes or other means; and it does not represent the estimated amount of the account's future transactions with the public. For example, if the account records the transactions of a social insurance program, the debt that it holds does not represent the actuarial present value of expected future benefits for either the current participants in the program or the larger group of current participants plus the expected future participants over some stated time period. The future transactions of Federal social insurance and employee retirement programs, which own 91 percent of the debt held by Government accounts, are important in their own right and need to be consid-

ered separately. This can be done through information published in actuarial and financial reports for these programs.<sup>4</sup> Debt held by the public is therefore a better concept than gross Federal debt for analyzing the effect of the budget on the economy.

Debt securities do not encompass all the liabilities of the Federal Government. For example, accounts payable occur in the normal course of buying goods and services; social security benefits are due and payable as of the end of the month but, according to statute, are paid during the next month; loan guarantee liabilities are incurred when the Government guarantees the payment of interest and principal on private loans; and liabilities for future pension payments are incurred as part of the current compensation for the services performed by Federal civilian and military employees in producing Government outputs. Like debt securities sold in the credit market, these liabilities have their own distinctive effects on the economy. Federal liabilities are analyzed within the broader conceptual framework of Federal resources and responsibilities in chapter 3 of this volume, "Stewardship: Toward a Federal Balance Sheet." The different types of liabilities are reported annually in the financial statements of the major Federal agencies and in the *Financial Report of the United States Government*, prepared by the Treasury Department.

### Government Surpluses or Deficits and the Change in Debt

Table 13–2 summarizes Federal borrowing and debt from 2001 through 2007. In 2001 the Government repaid \$90 billion of debt held by the public, so that the debt outstanding decreased to \$3,320 billion. The debt held by Government accounts increased \$231 billion, and gross Federal debt increased by \$141 billion to a level of \$5,770 billion.

**Debt held by the public.**—The Federal Government primarily finances deficits by borrowing from the public, and it primarily uses surpluses to repay debt held by the public. Table 13–2 shows the relationship between the Federal surplus or deficit and the change in debt held by the public. The borrowing or debt repayment depends on the Federal Government's expenditure programs and tax laws, on the economic conditions that influence tax receipts and outlays, and on debt management policy. The sensitivity of the budget to economic conditions is analyzed in chapter 2 of this volume.

The total or unified budget surplus consists of two parts: the on-budget surplus or deficit; and the surplus of the off-budget Federal entities, which have been excluded from the budget by law. Under present law, the off-budget Federal entities are the social security trust funds (old-age and survivors insurance and dis-

ability insurance) and the Postal Service fund.<sup>5</sup> The off-budget totals are virtually the same as social security, which had a large surplus in 2001 and is estimated to have large and growing surpluses throughout the projection period. The on-budget and off-budget surpluses or deficits are added together to determine the Government's financing needs.

The Government's need to borrow, or its ability to repay debt held by the public, has always depended on several other factors besides the unified budget surplus or deficit, such as the change in the Treasury operating cash balance. As shown in table 13–2, these other factors—which in this table are called "financing other than the change in debt held by the public"—can either increase or decrease the Government's need to borrow or its ability to repay debt. (An increase in its ability to repay debt is represented by a positive sign, like a surplus; a decrease is represented by a negative sign, like a deficit.) In 2001 the total surplus was \$127 billion and the "financing other than the change in debt held by the public" was –\$37 billion. As a result, the Government was able to repay \$90 billion of publicly held debt.

When the surplus or deficit is large, it is usually a good approximation to say that "the surplus is used to repay debt held by the public" or "the deficit is financed by borrowing from the public." Over the last 15 years, the cumulative deficit was \$1,432 billion and the increase in debt held by the public was \$1,579 billion. The other factors added a total of \$147 billion of borrowing, an average of \$10 billion per year. The variation was wide, ranging from additional borrowing (or lower repayment) of \$37 billion to reduced borrowing of \$19 billion. The other factors that affect borrowing do not depend on the size of the surplus or deficit. Thus, when a surplus or deficit is moderate in size, the other factors that affect borrowing may account for a large proportion of the change in Federal debt held by the public.

Some of these other factors are small in most years compared to borrowing from the public, even when the surplus or deficit is relatively small. This is because they are limited by their own nature. Decreases in cash balances, for example, while they may occasionally be large, are inherently limited by past accumulations, which themselves required financing when they were built up. Increases in cash balances are limited because it is more efficient to pay off debt.

However, a special factor in the financing will have a large one-time effect in 2002, and two other factors may be significant for extended periods.

The first of these factors will be net purchases of non-Federal securities by the National Railroad Retirement Investment Trust. This trust fund was established by the Railroad Retirement and Survivors' Improvement Act of 2001. Under this Act, most of the assets in the Railroad Retirement Board trust funds are transferred to the new trust fund, which is expected to invest

<sup>4</sup>Extensive actuarial analyses of the social security and medicare programs are published in the annual reports of the boards of trustees of these funds. Annual actuarial reports are also prepared for Federal employee retirement funds. A summary of actuarial estimates for these and other programs is included annually in the *Financial Report of the United States Government*, prepared by the Treasury Department.

<sup>5</sup>For further explanation of the off-budget Federal entities, see chapter 20, "Off-Budget Federal Entities and Non-Budgetary Activities."

primarily in private stocks and bonds. The Act ordered special treatment of the purchase or sale of non-Federal assets by this trust fund, treating such purchases as a means of financing rather than an outlay. Therefore, the increased need to borrow from the public to finance the purchase of non-Federal assets is masked as part of the “financing other than the change in debt held by the public” rather than included as an increase in the deficit. The budget estimates that this will increase borrowing and publicly held debt by \$15 billion in 2002. Net purchases or sales in subsequent years are estimated to be relatively small.<sup>6</sup>

The second factor is premiums on debt buybacks—the excess of the price paid over the book value. The Treasury Department is buying back some outstanding bonds as part of its management of the publicly held debt. The premiums at present are the result of interest rates having fallen since the bonds were sold, as a result of which the market value of the bonds is much higher than their book value. The premiums are recorded outside the budget totals as a separate entry in the “financing other than the change in debt held by the public.” It is important to note, however, that the volume of buybacks to date has been small relative to the outstanding stock of debt. The premiums were \$5.5 billion in 2000 on bonds with a book value of \$21.2 billion and were \$10.7 billion in 2001 on bonds with a book value of \$33.8 billion.

Estimates for 2002 include only premiums paid on buybacks through December 2001. Treasury has announced that future decisions about buyback operations will be part of the regular quarterly refunding announcements. Treasury has also said that there are likely to be periods in which they do not conduct buyback operations and other periods in which they do conduct such operations. The reason for classification as a means of financing is discussed in a section of chapter 25, “Budget System and Concepts and Glossary.” (Discounts would be recorded in the same way, if interest rates were to rise above the rates at the time of sale.)<sup>7</sup>

The third major factor was created by the Federal Credit Reform Act of 1990. Budget outlays for direct loans and loan guarantees consist of the estimated subsidy cost of the loans or guarantees at the time when the direct loans or guaranteed loans are disbursed. The cash flows to and from the public resulting from these loans and guarantees are not costs to the Government except for those costs already included in budget outlays. Therefore, they are non-budgetary in nature and are recorded as transactions of the non-budgetary financing account for each credit program.<sup>8</sup> The net cash flows of the financing accounts, including

intragovernmental transactions as well as transactions with the public, are called “net financing disbursements.” They are defined in the same way as the “outlays” of a budgetary account and therefore affect the ability to repay debt held by the public, or the requirement for borrowing from the public, in the same way as the surplus or deficit.

The net financing disbursements are partly due to intragovernmental transactions with budgetary accounts (the receipt of subsidy payment and the receipt or payment of interest), and partly due to transactions with the public (disbursement and repayment of loans, receipt of interest and fees, payment of default claims, and so forth). The intragovernmental transactions do not affect Federal borrowing from the public. Although the surplus or deficit changes, the net financing disbursement changes in an equal amount with the opposite sign, so the effects cancel out on a net basis. On the other hand, financing account disbursements to the public increase the requirement for borrowing from the public in the same way as an increase in budget outlays that are disbursed to the public in cash. Financing account receipts from the public can be used to finance the payment of the Government’s obligations, and therefore reduce the requirement for Federal borrowing from the public in the same way as an increase in budget receipts.

The impact of the financing accounts became large in the middle 1990s. By 2001 they required \$23 billion of financing, and thus reduced the repayment of debt by this amount. They are estimated to require additional financing of \$17 billion in 2002 and around \$10 billion in each of the following few years. A major part is normally due to the direct student loan program. Since direct loans require cash disbursements equal to the full amount of the loans when the loans are made, Federal borrowing requirements are initially increased. Later, when the loans are repaid, Federal borrowing requirements will decrease.

**Debt held by Government accounts.**—The amount of Federal debt issued to Government accounts depends largely on the surpluses of the trust funds, both on-budget and off-budget, which owned 95 percent of the total Federal debt held by Government accounts at the end of 2001. In 2001, for example, the total trust fund surplus was \$228 billion, and Government accounts invested \$231 billion in Federal securities. The difference is mainly because some revolving funds and special funds also hold Federal debt. In addition, the trust funds may change the amount of their cash assets not currently invested. A new reason, starting in 2002, is that the National Railroad Retirement Investment Trust will be invested largely in private securities. The amounts of debt held in major accounts and the annual investments are shown in table 13–4.

### Agency Debt

Several Federal agencies, shown in table 13–3, sell debt securities to the public and at times in the past have sold securities to other Government accounts. Dur-

<sup>6</sup>The budget treatment of this fund is further discussed in chapter 25, “Budget System and Concepts and Glossary.”

<sup>7</sup>For a detailed explanation, see “Budget System and Concepts and Glossary,” chapter 24 in *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2001*, pages 457–58.

<sup>8</sup>The Federal Credit Reform Act of 1990 (sec. 505(b)) requires that the financing accounts be non-budgetary. As explained in chapter 20, “Off-Budget Federal Entities and Non-Budgetary Activities,” they are non-budgetary in concept because they do not measure cost. For additional discussion of credit reform, see chapter 25 of this volume, “Budget System and Concepts and Glossary,” and the other references cited in chapter 20.

ing 2001, agencies repaid \$0.6 billion to the public. Agency debt is only one percent of Federal debt held by the public. Agency borrowing and repayment of debt is estimated to remain small in 2002 and 2003.

The reasons for issuing agency debt differ considerably from one agency to another. The predominant agency borrower is the Tennessee Valley Authority, which had borrowed \$25 billion from the public as of the end of 2001, or 94 percent of the total debt of all agencies. TVA sells debt primarily to finance capital expenditures.

The Federal Housing Administration, on the other hand, has for many years issued both checks and debentures as means of paying claims to the public that arise from defaults on FHA-insured mortgages. Issuing debentures to pay the Government's bills is equivalent to borrowing from the public and then paying the bills by disbursing the cash borrowed, so the transaction is recorded as being simultaneously an outlay and a borrowing. The debentures are therefore classified as agency debt. The borrowing by FHA and a few other agencies that have engaged in similar transactions is thus inherent in the way that their programs operate.<sup>9</sup>

Some types of lease-purchase contracts are equivalent to direct Federal construction financed by Federal borrowing. A number of years ago, the Federal Government guaranteed the debt used to finance the construction of buildings for the National Archives and the Architect of the Capitol, and has subsequently exercised

full control over the design, construction, and operation of the buildings. The construction expenditures and interest were therefore classified as Federal outlays, and the borrowing was classified as Federal agency borrowing from the public.

The proper budgetary treatment of lease-purchases was further examined in connection with the Budget Enforcement Act of 1990. Several changes were made. Among other decisions, it was determined that outlays for a lease-purchase without substantial private risk will be recorded in an amount equal to the asset cost over the period during which the contractor constructs, manufactures, or purchases the asset; if the asset already exists, the outlays will be recorded when the contract is signed. Agency borrowing will be recorded each year to the extent of these outlays. The agency debt will subsequently be redeemed over the lease payment period according to an amortization schedule by a portion of the annual lease payments. This rule was effective starting in 1991.<sup>10</sup> The new budgetary treatment was reviewed in connection with the Balanced Budget Act of 1997. Some clarifications were made, but there were no substantive changes from previous practice.

The Tennessee Valley Authority recently signed a contract to outlease and lease-back some newly constructed power plants from private investors. The Office of Management and Budget has determined that the arrangement is a "lease-purchase without substantial

<sup>9</sup>The debt securities of the FSLIC Resolution fund were also issued as a means of paying specified bills. The budgetary treatment of these and similar securities is further explained in Special Analysis E of the 1989 *Budget*, pp. E-25 to E-26; and Special Analysis E of the 1988 *Budget*, pp. E-27 to E-28.

<sup>10</sup>The rule addressed all lease-purchases and capital leases from the public, not just those without substantial private risk. For all such contracts, the rule required that budget authority be recorded up front for the present value of the lease payments. See OMB Circular No. A-11, Appendix B. Also see the section on "outlays" in chapter 25, "Budget System and Concepts and Glossary."

**Table 13-3. AGENCY DEBT**

(In millions of dollars)

|   | Borrowing or repayment (-) of debt |               |               | Debt end of 2003 estimate |
|---|------------------------------------|---------------|---------------|---------------------------|
|   | 2001 Actual                        | 2002 Estimate | 2003 Estimate |                           |
| <b>Borrowing from the public:</b>                                 |                                    |               |               |                           |
| Housing and Urban Development:                                    |                                    |               |               |                           |
| Federal Housing Administration .....                              | 5                                  |               |               | 231                       |
| Small Business Administration:                                    |                                    |               |               |                           |
| Participation certificates: Section 505 development company ..... |                                    |               |               | 7                         |
| Architect of the Capitol .....                                    | -2                                 | -3            | -2            | 166                       |
| Farm Credit System Financial Assistance Corporation .....         |                                    |               | -450          | 325                       |
| Federal Communications Commission .....                           |                                    |               |               | 125                       |
| Federal Deposit Insurance Corporation:                            |                                    |               |               |                           |
| FSLIC Resolution Fund .....                                       |                                    | -63           |               |                           |
| National Archives .....   | -6                                 | -7            | -7            | 251                       |
| Tennessee Valley Authority:                                       |                                    |               |               |                           |
| Bonds and Notes .....   | -607                               | -56           | -252          | 25,073                    |
| Lease obligations .....   |                                    | 296           | -9            | 287                       |
| <b>Total, borrowing from the public .....</b>                     | <b>-610</b>                        | <b>167</b>    | <b>-720</b>   | <b>26,465</b>             |
| <b>Borrowing from other funds:</b>                                |                                    |               |               |                           |
| Postal Service Fund <sup>1</sup> .....                            | -51                                |               |               |                           |
| <b>Total, borrowing from other funds .....</b>                    | <b>-51</b>                         |               |               |                           |
| <b>Total, agency borrowing .....</b>                              | <b>-661</b>                        | <b>167</b>    | <b>-720</b>   | <b>26,465</b>             |

<sup>1</sup>The Postal Service debt held by other funds is the result of the FFB swapping Postal Service securities with the Civil Service Retirement and Disability trust fund during 1996 in exchange for Treasury securities having an equal present value. See the narrative for further explanation.



private risk,” and therefore the budget records outlays and budget authority in 2002. Agency debt in the form of a lease obligation is recorded as the means of financing this outlay. The amount of the lease obligation is shown in table 13–3 separately from TVA bonds and notes. The obligation is \$296 million at the end of 2002 and declines steadily as it is amortized.

The amount of agency securities sold to the public has been reduced by borrowing from the Federal Financing Bank (FFB). The FFB is an entity within the Treasury Department, one of whose purposes is to substitute Treasury borrowing for agency borrowing from the public. It has the authority to purchase agency debt and finance these purchases by borrowing from the Treasury. Agency borrowing from the FFB is not included in gross Federal debt. It would be double counting to add together (a) the agency borrowing from the FFB and (b) the Treasury borrowing from the public that was needed to provide the FFB with the funds to lend to the agencies.

The debt of the agencies that borrow from the FFB is not subject to the statutory debt limitation. This enabled Treasury to raise additional cash to avoid default during the dispute with Congress over the budget and the debt limit six years ago. In February 1996, FFB swapped most of its holdings of TVA and Postal Service debt to the Civil Service Retirement and Disability trust fund (CSRDF) in exchange for Treasury securities. These securities have been redeemed, the last amount—\$51 million of Postal Service securities—in 2001. The securities are shown in table 13–3 as amounts that agencies borrowed from other funds and in table 13–4 as agency debt held by Government accounts.<sup>11</sup>

### Debt Held by Government Accounts

Trust funds, and some special funds and public enterprise revolving funds, accumulate cash in excess of cur-

rent requirements in order to meet future obligations. These cash surpluses are invested in Treasury debt.

Investment by trust funds and other Government accounts has risen greatly over the past two decades. It was \$231 billion in 2001, as shown in table 13–4, and is estimated to be \$296 billion in 2003. The holdings of Federal securities by Government accounts are estimated to grow to \$2,956 billion by the end of 2003, or 45 percent of the gross Federal debt. This percentage is estimated to rise further in the following years, as the budget surpluses reduce the debt held by the public and as the trust funds and several major Federal funds continue to accumulate surpluses. By 2007, debt held by Government accounts is estimated to be 57 percent of the gross Federal debt.

The large investment by Government accounts is concentrated among a few trust funds. The two social security trust funds—old-age and survivors insurance and disability insurance—have a large combined surplus and invest \$497 billion during 2001–03, which is 68 percent of the total estimated investment by Government accounts. The two medicare trust funds hospital insurance and supplementary medical insurance—account for another 13 percent of the total estimated investment.

Apart from these four large funds, the largest investment is by the Federal employee retirement and disability trust funds. The principal trust fund for Federal civilian employees is the civil service retirement and disability trust fund, which accounts for 14 percent of the total investment by Government accounts during 2001–03. The military retirement trust fund accounts for 2 percent. Altogether, social security, medicare, and these two retirement funds account for 97 percent of the investment by all Government accounts during this period. At the end of 2003, they are estimated to own 88 percent of the total debt held by Government accounts.

<sup>11</sup>For further discussion of the debt limit dispute and the swap of securities between the FFB and CSRDF, see *Analytical Perspectives, Budget of the United States Government, Fiscal Year 1998*, pages 222 and 225.

Table 13-4. DEBT HELD BY GOVERNMENT ACCOUNTS <sup>1</sup>

(In millions of dollars)

| Description   | Investment or disinvestment (-) |                |                | Holdings end of 2003 estimate |
|---|---------------------------------|----------------|----------------|-------------------------------|
|   | 2001 Actual                     | 2002 Estimate  | 2003 Estimate  |                               |
| <b>Investment in Treasury debt:</b>                                   |                                 |                |                |                               |
| Defense-Military:   |                                 |                |                |                               |
| Uniformed Services Retiree Health Care Fund .....                     | .....                           | .....          | 18,982         | 18,982                        |
| Energy:   |                                 |                |                |                               |
| Nuclear waste disposal fund .....                                     | 1,737                           | 448            | .....          | 11,420                        |
| Uranium enrichment decontamination fund .....                         | 393                             | 486            | 573            | 3,615                         |
| Health and Human Services:  |                                 |                |                |                               |
| Federal hospital insurance trust fund .....                           | 28,278                          | 35,355         | 38,825         | 271,317                       |
| Federal supplementary medical insurance trust fund .....              | -3,097                          | -2,036         | -1,077         | 38,865                        |
| Vaccine Injury compensation fund .....                                | 51                              | 65             | 100            | 1,793                         |
| Housing and Urban Development:  |                                 |                |                |                               |
| Federal Housing Administration mutual mortgage fund .....             | 23                              | 7,000          | 4,500          | 28,782                        |
| Other HUD .....   | 386                             | 262            | 273            | 7,117                         |
| Interior: Abandoned Mine Reclamation fund .....                       | 19                              | 117            | 146            | 2,129                         |
| Labor:  |                                 |                |                |                               |
| Unemployment trust fund .....   | 2,239                           | -12,109        | -3,313         | 73,216                        |
| Pension Benefit Guaranty Corporation .....                            | 1,076                           | 1,318          | 1,370          | 14,263                        |
| State: Foreign Service retirement and disability trust fund .....     | 534                             | 542            | 551            | 12,285                        |
| Transportation:   |                                 |                |                |                               |
| Highway trust fund .....  | -6,908                          | 132            | -2,012         | 22,235                        |
| Airport and airway trust fund .....                                   | 563                             | -893           | 274            | 13,041                        |
| Oil spill liability trust fund .....                                  | -71                             | -88            | -115           | 925                           |
| Aquatic resources trust fund .....                                    | 112                             | -24            | 26             | 1,306                         |
| Treasury: Exchange stabilization fund .....                           | -1,015                          | 17             | .....          | 10,031                        |
| Veterans Affairs:   |                                 |                |                |                               |
| National service life insurance trust fund .....                      | -166                            | -233           | -307           | 11,099                        |
| Other trust funds .....   | 40                              | 29             | 16             | 1,925                         |
| Federal funds .....   | -18                             | -17            | -19            | 490                           |
| Defense-Civil:  |                                 |                |                |                               |
| Military retirement trust fund .....                                  | 7,630                           | 3,162          | 6,767          | 166,907                       |
| Harbor maintenance trust fund .....                                   | 134                             | 66             | -38            | 1,833                         |
| Environmental Protection Agency:                                      |                                 |                |                |                               |
| Hazardous substance trust fund .....                                  | -496                            | -375           | -420           | 2,835                         |
| Leaking underground storage tank trust fund .....                     | 35                              | 279            | 223            | 2,206                         |
| International Assistance Programs:                                    |                                 |                |                |                               |
| Overseas Private Investment Corporation .....                         | 223                             | 251            | 228            | 3,829                         |
| Office of Personnel Management:                                       |                                 |                |                |                               |
| Civil Service retirement and disability trust fund <sup>3</sup> ..... | 30,622                          | 30,354         | 40,871         | 613,833                       |
| Employees life insurance fund .....                                   | 1,317                           | 2,546          | 1,056          | 27,292                        |
| Employees health benefits fund <sup>4</sup> .....                     | 662                             | 642            | 11,798         | 19,091                        |
| Social Security Administration:                                       |                                 |                |                |                               |
| Federal old-age and survivors insurance trust fund <sup>2</sup> ..... | 140,594                         | 140,336        | 157,507        | 1,331,957                     |
| Federal disability insurance trust fund <sup>2</sup> .....            | 22,134                          | 17,211         | 19,628         | 172,681                       |
| Farm Credit System Insurance Corporation:                             |                                 |                |                |                               |
| Farm Credit System Insurance fund .....                               | 79                              | 102            | 111            | 1,813                         |
| Federal Deposit Insurance Corporation:                                |                                 |                |                |                               |
| Bank Insurance fund .....   | 1,352                           | -1,363         | .....          | 29,314                        |
| FSLIC Resolution fund .....   | 142                             | 320            | .....          | 2,970                         |
| Savings Association Insurance fund .....                              | -93                             | 333            | .....          | 10,987                        |
| National Credit Union Administration: Share insurance fund .....      | 197                             | 373            | 405            | 5,321                         |
| Postal Service fund <sup>2</sup> .....                                | 172                             | -415           | .....          | 843                           |
| Railroad Retirement Board trust funds <sup>1</sup> .....              | 1,818                           | -14,746        | -615           | 4,959                         |
| Other Federal funds .....   | 315                             | 362            | -90            | 7,388                         |
| Other trust funds .....   | 35                              | -473           | -224           | 6,565                         |
| Unrealized discount <sup>1</sup> .....                                | 372                             | .....          | .....          | -1,858                        |
| <b>Total, investment in Treasury debt <sup>1</sup> .....</b>          | <b>231,421</b>                  | <b>209,336</b> | <b>296,000</b> | <b>2,955,602</b>              |
| <b>Investment in agency debt:</b>                                     |                                 |                |                |                               |
| Office of Personnel Management:                                       |                                 |                |                |                               |
| Civil Service retirement and disability trust fund <sup>3</sup> ..... | -51                             | .....          | .....          | .....                         |
| <b>Total, investment in agency debt .....</b>                         | <b>-51</b>                      | <b>.....</b>   | <b>.....</b>   | <b>.....</b>                  |
| <b>Total, investment in Federal debt <sup>1</sup> .....</b>           | <b>231,370</b>                  | <b>209,336</b> | <b>296,000</b> | <b>2,955,602</b>              |

**Table 13-4. DEBT HELD BY GOVERNMENT ACCOUNTS <sup>1</sup>—Continued**  
(In millions of dollars)

| Description  | Investment or disinvestment (-) |               |               | Holdings end of 2003 estimate |
|--|---------------------------------|---------------|---------------|-------------------------------|
|  | 2001 Actual                     | 2002 Estimate | 2003 Estimate |                               |
| MEMORANDUM   |                                 |               |               |                               |
| Investment by Federal funds (on-budget) <sup>4</sup> ..... | 4,815                           | 10,007        | 38,277        | 177,542                       |
| Investment by Federal funds (off-budget) .....             | 172                             | -415          | .....         | 843                           |
| Investment by trust funds (on-budget) <sup>4</sup> .....   | 63,282                          | 42,195        | 80,588        | 1,274,437                     |
| Investment by trust funds (off-budget) .....               | 162,729                         | 157,548       | 177,135       | 1,504,638                     |
| Unrealized discount <sup>1</sup> .....                     | 372                             | .....         | .....         | -1,858                        |

<sup>1</sup> Debt held by Government accounts is measured at face value except for the Treasury zero-coupon bonds held by the Nuclear Waste Disposal fund and the Railroad Retirement Board (Rail Industry Pension Fund), which are recorded at market or redemption price; and the unrealized discount on Government account series, which is not distributed by account. Changes are not estimated in the unrealized discount. If recorded at face value, the debt held by the Nuclear Waste Disposal fund would be \$11.0 billion higher than recorded in this table at the end of 2001 and the debt held by the Railroad Retirement Board would be \$6.5 billion higher.

<sup>2</sup> Off-budget Federal entity.

<sup>3</sup> The FFB swapped Treasury securities with the Civil Service retirement and disability trust fund (CSRDF) in 1996 in exchange for agency securities having an equal present value. The result is shown in this table as an "investment in agency debt" by CSRDF.

<sup>4</sup> The Employees Health Benefits Fund is proposed to be reclassified from a trust fund to a special fund as of 2003. The transfer of Federal securities from one group of funds to another group is not treated as a disinvestment by the trust fund group or an investment by the Federal funds group.

*Technical note on measurement.*—The Treasury securities held by Government accounts consist almost entirely of the Government account series. Most were issued at par value (face value), and the securities issued at a discount or premium were traditionally recorded at par in the OMB and Treasury reports on Federal debt. However, there are two kinds of exceptions. First, in 1991, Treasury began to issue zero-coupon bonds to a very few Government accounts. Because the purchase price is a small fraction of par value and the amounts are large, the holdings are recorded in table 13-4 at par value less unamortized discount. The only two Government accounts that currently hold zero-coupon bonds are the Nuclear Waste Disposal fund in the Department of Energy and the Rail Industry Pension fund under the Railroad Retirement Board. The total unamortized discount of these zero-coupon bonds was -\$16.6 billion at the end of 2001.

Second, in September 1993 Treasury began to subtract the unrealized discount on other Government account series securities in calculating "net federal securities held as investments of government accounts." Unlike the discount recorded for zero-coupon bonds or for any debt held by the public, the unrealized discount is the discount at the time of issue and is not amortized over the term of the security. In table 13-4 it is shown as a separate item at the end of the table and not distributed by account. The amount was -\$1.9 billion at the end of 2001.

### Limitations on Federal Debt

*Definition of debt subject to limit.*—Statutory limitations have usually been placed on Federal debt. Until World War I, the Congress ordinarily authorized a specific amount of debt for each separate issue. Beginning with the Second Liberty Bond Act of 1917, however, the nature of the limitation was modified in several steps until it developed into a ceiling on the total amount of most Federal debt outstanding. This last type of limitation has been in effect since 1941. The limit currently applies to most debt issued by the Treasury since September 1917, whether held by the

public or by Government accounts; and other debt issued by Federal agencies that, according to explicit statute, is guaranteed as to principal and interest by the United States Government.

The middle part of table 13-2 compares total Treasury debt with the amount of Federal debt that is subject to the limit. Most of the Treasury debt not subject to limit was issued by the FFB (Federal Financing Bank). The FFB is authorized to have outstanding up to \$15 billion of publicly issued debt, and this amount was issued several years ago to the Civil Service Retirement and Disability trust fund. The remaining Treasury debt not subject to limit consists almost entirely of silver certificates and other currencies no longer being issued.

The sole type of agency debt currently subject to the general limit is the debentures issued by the Federal Housing Administration, which were only \$231 million at the end of 2001. Some of the other agency debt, however, is subject to its own statutory limit. For example, the Tennessee Valley Authority is limited to \$30 billion of securities outstanding.

The comparison between Treasury debt and debt subject to limit also includes an adjustment for measurement differences in the treatment of discounts and premiums. As explained elsewhere in this chapter, debt securities may be sold at a discount or premium, and the measurement of debt may take this into account rather than recording the face value of the securities. However, the measurement differs between gross Federal debt (and its components) and the statutory definition of debt subject to limit. An adjustment is needed to derive debt subject to limit (as defined by law) from Treasury debt, and this adjustment is defined in footnote 9 to table 13-2. The amount is relatively small: \$4.9 billion at the end of 2001 compared to the total unamortized discount (less premium) of \$64.2 billion on all Treasury securities.

*Changes in the debt limit.*—The statutory debt limit has been changed many times. Since 1960, Congress has passed 68 separate acts to raise the limit,

extend the duration of a temporary increase, or revise the definition. For a long period up to mid-1990, the debt limit was also changed frequently. Since then, however, the debt limit has been increased three times by amounts large enough to last for two years or more. These large increases were all part of major deficit reduction packages.<sup>12</sup>

Major increases in the debt limit were enacted as part of the deficit reduction packages in the Omnibus Budget Reconciliation Acts of 1990 and 1993. Both changes in law were preceded by one or more temporary increases in the limit before agreement was reached on the debt and the deficit reduction measures together. Both increases in the debt limit were large enough to last over two years without a further change in law, the longest times without an increase since the period from 1946 to 1954.

The debt again approached the limit in 1995, and the limit again became part of the larger issue of deficit reduction. During an extended period of dispute between the President and the Congress, the Treasury Department took a number of administrative actions to keep within the limit and the Congress passed two acts providing temporary exemptions from the limit.

<sup>12</sup>The Acts and the statutory limits since 1940 are enumerated in *Historical Tables, Budget of the United States Government*, table 7.3.

In March 1996, although agreement had not been reached on deficit reduction, Congress passed an act that increased the debt limit from \$4,900 billion to \$5,500 billion.

During 1997, unlike 1996, the President and the Congress reached agreement on a plan to balance the budget. This included a sufficient increase in the debt limit to accommodate Government finances for longer than possible under the limit enacted in the previous year, even though the amount of debt at that time was considerably under the limit. As a result, the Balanced Budget Act of 1997, which the President signed into law on August 5, 1997, increased the debt limit to \$5,950 billion.

This limit has now been in effect for over four years. As tables 13-2 and 13-5 show, however, the estimated debt subject to limit at the end of this year will be \$6,099, much higher than allowed by current law. An increase in the debt limit will be needed during this fiscal year to permit the Federal Government to meet its obligations—to borrow the additional cash that is needed to pay bills as they come due, and to invest the surpluses of trust funds and other Government accounts in Treasury securities as generally required by law.

**Table 13-5. FEDERAL FUNDS FINANCING AND CHANGE IN DEBT SUBJECT TO STATUTORY LIMIT**

(In billions of dollars)

| Description  | 2000<br>Actual | Estimate     |              |              |              |              |              |
|--|----------------|--------------|--------------|--------------|--------------|--------------|--------------|
|  |                | 2002         | 2003         | 2004         | 2005         | 2006         | 2007         |
| <b>Federal funds surplus or deficit (-)</b> .....  | -101.3         | -318.8       | -337.5       | -303.3       | -253.5       | -234.8       | -224.9       |
| Means of financing other than borrowing:   |                |              |              |              |              |              |              |
| Premiums paid (-) on buybacks of Treasury securities <sup>1</sup> .....                                | -10.7          | -2.8         | .....        | .....        | .....        | .....        | .....        |
| Net purchases (-) of non-Federal securities by the National Railroad Retirement Investment Trust ..... | .....          | -15.4        | -0.9         | -*           | *            | 0.2          | 0.3          |
| Change in: <sup>2</sup>  |                |              |              |              |              |              |              |
| Treasury operating cash balances .....   | 8.4            | -15.8        | .....        | -5.0         | .....        | .....        | -5.0         |
| Checks outstanding, deposit funds, etc. <sup>3</sup> .....   | -10.3          | 11.5         | -0.9         | .....        | .....        | .....        | .....        |
| Seignorage on coins .....  | 1.3            | 0.9          | 1.1          | 1.2          | 1.2          | 1.2          | 1.2          |
| Less: Net financing disbursements:   |                |              |              |              |              |              |              |
| Direct loan financing accounts .....   | -19.1          | -15.3        | -15.4        | -14.5        | -14.7        | -14.9        | -14.7        |
| Guaranteed loan financing accounts .....   | -4.2           | -1.6         | 3.0          | 2.8          | 4.3          | 5.0          | 5.4          |
| <b>Total, means of financing other than borrowing</b> .....  | <b>-34.6</b>   | <b>-38.5</b> | <b>-13.0</b> | <b>-15.6</b> | <b>-9.2</b>  | <b>-8.5</b>  | <b>-12.9</b> |
| Decrease or increase (-) in Federal debt held by Federal funds .....                                   | -5.0           | -9.6         | -38.3        | -47.7        | -51.7        | -55.6        | -59.8        |
| Increase or decrease (-) in Federal debt not subject to limit .....                                    | -0.7           | 0.2          | -0.7         | -0.8         | -1.1         | -0.7         | -0.8         |
| <b>Total, requirement for Federal funds borrowing subject to debt limit</b> .....                      | <b>141.5</b>   | <b>366.7</b> | <b>389.5</b> | <b>367.4</b> | <b>315.5</b> | <b>299.6</b> | <b>298.3</b> |
| Adjustment for change in discount and premium <sup>4</sup> .....                                       | -0.4           | .....        | .....        | .....        | .....        | .....        | .....        |
| <b>Increase in debt subject to limit</b> .....   | <b>141.2</b>   | <b>366.7</b> | <b>389.5</b> | <b>367.4</b> | <b>315.5</b> | <b>299.6</b> | <b>298.3</b> |
| <b>ADDENDUM</b>  |                |              |              |              |              |              |              |
| Debt subject to statutory limit <sup>5</sup> .....   | 5,732.8        | 6,099.5      | 6,489.0      | 6,856.4      | 7,171.9      | 7,471.5      | 7,769.8      |

\* \$50 million or less.

<sup>1</sup> Includes only premiums paid on buybacks through December 2001. Estimates are not made for subsequent buybacks.

<sup>2</sup> A decrease in the Treasury operating cash balances (which is an asset) would be a means of financing the deficit and therefore has a positive sign. An increase in checks outstanding or deposit fund balances (which are liabilities) would also be a means of financing the deficit and would therefore also have a positive sign.

<sup>3</sup> Besides checks outstanding and deposit funds, includes accrued interest payable on Treasury debt, miscellaneous liability accounts, allocations of special drawing rights, and as an offset, cash and monetary assets other than the Treasury operating cash balance, miscellaneous asset accounts, and profit on the sale of gold.

<sup>4</sup> Consists of unamortized discount (less premium) on public issues of Treasury notes and bonds (other than zero-coupon bonds) and unrealized discount on Government account series securities.

<sup>5</sup> The statutory debt limit is \$5,950 billion.

**Federal funds financing and the change in debt subject to limit.**—The change in debt held by the public, as shown in table 13–2, is determined primarily by the total Government deficit or surplus. The debt subject to limit, however, includes not only debt held by the public but also debt held by Government accounts. The change in debt subject to limit is therefore determined both by the factors that determine the total Government deficit or surplus and by the factors that determine the change in debt held by Government accounts.

The budget is composed of two groups of funds, Federal funds and trust funds. The Federal funds, in the main, are derived from tax receipts and borrowing and are used for the general purposes of the Government. The trust funds, on the other hand, are financed by taxes or other collections earmarked by law for specified purposes, such as paying social security benefits or making grants to State governments for highway construction.<sup>13</sup>

A Federal funds deficit must generally be financed by borrowing, which can be done either by selling securities to the public or by issuing securities to Government accounts that are not within the Federal funds group. Federal funds borrowing consists almost entirely of Treasury securities that are subject to the statutory debt limit. Very little debt subject to statutory limit has been issued in past years for reasons other than financing the Federal funds deficit. The change in debt subject to limit is therefore determined primarily by the Federal funds deficit, which is equal to the difference between the total Government surplus and the trust fund surplus. Trust fund surpluses are almost entirely invested in securities subject to the debt limit, and trust funds hold most of the debt held by Government accounts.

Table 13–5 derives the change in debt subject to limit. In 2001 the Federal funds deficit was \$101 billion, and other factors increased the requirement to borrow subject to limit by \$40 billion. The largest of these other factors (\$19 billion) was the net financing disbursements of the direct loan financing accounts. As explained in an earlier section, they are excluded from the budget by law because they are not a cost to the Government, but they have to be financed and in most years they are sizable. The next largest single factor was the premiums paid on buybacks of Treasury securities (\$11 billion). As a net result of all these factors, debt subject to limit *increased* by \$141 billion, while debt held by the public *decreased* by \$90 billion.

The debt subject to limit is estimated to increase to \$6,099 billion by the end of 2002, which is much more than the present statutory limit of \$5,950 billion. This is led by a sharp rise in the Federal funds deficit, supplemented by the other factors shown in table 13–5 including especially the net financing disbursements of the direct loan financing accounts, an increase in the end-of-year operating cash balance to the desired level,

and the purchase of non-Federal securities by the National Railroad Retirement Investment Trust. During subsequent years the Federal funds continue to have large deficits, even after the budget returns to surplus, and other factors add to the requirement to borrow subject to the debt limit. Investment by special funds and revolving funds, especially the new special funds for retirement benefits, is the largest one of the other factors, although it has a much smaller effect than the Federal funds deficit. As a result, while debt held by the public increases by \$59 billion during 2002–07, debt subject to limit increases by \$2,037 billion.

### Debt Held by Foreign Residents

During most of American history, the Federal debt was held almost entirely by individuals and institutions within the United States. In the late 1960s, as shown in table 13–6, foreign holdings were just over \$10.0 billion, less than 5 percent of the total Federal debt held by the public.

Foreign holdings began to grow significantly starting in 1970. This increase has been almost entirely due to decisions by foreign central banks, corporations, and individuals, rather than the direct marketing of these securities to foreign residents. At the end of fiscal year 2001 foreign holdings of Treasury debt were \$1,170 billion, which was 35 percent of the total debt held by the public.<sup>14</sup> Foreign central banks owned 49 percent of the Federal debt held by foreign residents; private investors owned nearly all the rest. All the Federal debt held by foreign residents is denominated in dollars.

Although the amount of Federal debt held by foreign residents grew greatly over this period, the proportion that foreign residents own, after growing abruptly in the very early 1970s, did not change much again until the mid-1990s. During 1995–97, however, foreign holdings increased on average by around \$200 billion each year, considerably more than total Federal borrowing from the public.<sup>15</sup> As a result, the Federal debt held by individuals and institutions within the United States decreased in absolute amount during those years, despite further Federal borrowing, and the percentage of Federal debt held by foreign residents grew from 19 percent at the end of 1994 to 32 percent at the end of 1997. Since then, the changes in foreign debt holdings have been relatively moderate. Although the net effect has been to reduce foreign holdings, the percentage held by foreign residents has increased to 35 percent because of the decrease in total debt held by the public.

Foreign holdings of Federal debt are around 13–15 percent of the foreign-owned assets in the United States, depending on the method of measuring the total

<sup>14</sup> The amounts of debt reported by the Bureau of Economic Analysis, Department of Commerce, are different, but similar in size, due to a different method of valuing the securities.

<sup>15</sup> Table 13–6 shows foreign holdings increasing by only \$144.6 billion in 1995. However, as explained in footnote 5 to that table, a benchmark revision reduced the estimated holdings as of December 1994 (by \$47.9 billion). Because debt estimates were not revised retroactively, the increase in 1995 was more than the table shows. Before the benchmark revision, the increase was estimated to be \$192.6 billion.

<sup>13</sup> For further discussion of the trust funds and Federal funds groups, see chapter 16, “Trust Funds and Federal Funds.”

**Table 13-6. FOREIGN HOLDINGS OF FEDERAL DEBT**  
(Dollar amounts in billions)

| Fiscal year             | Debt held by the public |                      |                         | Borrowing from the public |                      |
|-------------------------|-------------------------|----------------------|-------------------------|---------------------------|----------------------|
|                         | Total                   | Foreign <sup>1</sup> | Percentage for-<br>eign | Total <sup>2</sup>        | Foreign <sup>1</sup> |
| 1965 .....              | 260.8                   | 12.3                 | 4.7                     | 3.9                       | 0.3                  |
| 1966 .....              | 263.7                   | 11.6                 | 4.4                     | 2.9                       | -0.7                 |
| 1967 .....              | 266.6                   | 11.4                 | 4.3                     | 2.9                       | -0.2                 |
| 1968 .....              | 289.5                   | 10.7                 | 3.7                     | 22.9                      | -0.7                 |
| 1969 .....              | 278.1                   | 10.3                 | 3.7                     | -11.4                     | -0.4                 |
| 1970 .....              | 283.2                   | 14.0                 | 5.0                     | 5.1                       | 3.8                  |
| 1971 .....              | 303.0                   | 31.8                 | 10.5                    | 19.8                      | 17.8                 |
| 1972 .....              | 322.4                   | 49.2                 | 15.2                    | 19.3                      | 17.3                 |
| 1973 .....              | 340.9                   | 59.4                 | 17.4                    | 18.5                      | 10.3                 |
| 1974 .....              | 343.7                   | 56.8                 | 16.5                    | 2.8                       | -2.6                 |
| 1975 .....              | 394.7                   | 66.0                 | 16.7                    | 51.0                      | 9.2                  |
| 1976 .....              | 477.4                   | 69.8                 | 14.6                    | 82.7                      | 3.8                  |
| TQ .....                | 495.5                   | 74.6                 | 15.1                    | 18.1                      | 4.9                  |
| 1977 .....              | 549.1                   | 95.5                 | 17.4                    | 53.6                      | 20.9                 |
| 1978 .....              | 607.1                   | 121.0                | 19.9                    | 58.0                      | 25.4                 |
| 1979 <sup>3</sup> ..... | 640.3                   | 120.3                | 18.8                    | 33.2                      | -0.7                 |
| 1980 .....              | 711.9                   | 121.7                | 17.1                    | 71.6                      | 1.4                  |
| 1981 .....              | 789.4                   | 130.7                | 16.6                    | 77.5                      | 9.0                  |
| 1982 .....              | 924.6                   | 140.6                | 15.2                    | 135.2                     | 9.9                  |
| 1983 .....              | 1,137.3                 | 160.1                | 14.1                    | 212.7                     | 19.5                 |
| 1984 .....              | 1,307.0                 | 175.5                | 13.4                    | 169.7                     | 15.4                 |
| 1985 <sup>3</sup> ..... | 1,507.4                 | 222.9                | 14.8                    | 200.3                     | 47.4                 |
| 1986 .....              | 1,740.8                 | 265.5                | 15.3                    | 233.4                     | 42.7                 |
| 1987 .....              | 1,889.9                 | 279.5                | 14.8                    | 149.2                     | 14.0                 |
| 1988 .....              | 2,051.8                 | 345.9                | 16.9                    | 161.9                     | 66.4                 |
| 1989 .....              | 2,191.0                 | 394.9                | 18.0                    | 139.1                     | 49.0                 |
| 1990 <sup>3</sup> ..... | 2,411.8                 | 440.3                | 18.3                    | 220.9                     | 45.4                 |
| 1991 .....              | 2,689.3                 | 477.3                | 17.7                    | 277.5                     | 37.0                 |
| 1992 .....              | 3,000.1                 | 535.2                | 17.8                    | 310.8                     | 57.9                 |
| 1993 .....              | 3,248.8                 | 591.3                | 18.2                    | 248.7                     | 56.1                 |
| 1994 .....              | 3,433.4                 | 655.8                | 19.1                    | 184.7                     | 64.5                 |
| 1995 <sup>3</sup> ..... | 3,604.8                 | 800.4                | 22.2                    | 171.3                     | 144.6                |
| 1996 .....              | 3,734.5                 | 978.1                | 26.2                    | 129.7                     | 177.7                |
| 1997 .....              | 3,772.8                 | 1,218.2              | 32.3                    | 38.3                      | 240.0                |
| 1998 .....              | 3,721.6                 | 1,216.9              | 32.7                    | -51.2                     | -1.2                 |
| 1999 <sup>3</sup> ..... | 3,632.9                 | 1,281.4              | 35.3                    | -88.7                     | 64.5                 |
| 2000 .....              | 3,410.1                 | 1,224.9              | 35.9                    | -222.8                    | -56.5                |
| 2001 .....              | 3,320.0                 | 1,170.0              | 35.2                    | -90.1                     | -55.0                |

<sup>1</sup> Estimated by Treasury Department. These estimates exclude agency debt, the holdings of which are believed to be small. The data on foreign holdings are recorded by methods that are not fully comparable with the data on debt held by the public. Projections of foreign holdings are not available.

<sup>2</sup> Borrowing from the public is defined as equal to the change in debt held by the public from the beginning of the year to the end, except to the extent that the amount of debt is changed by reclassification.

<sup>3</sup> Benchmark revisions reduced the estimated foreign holdings of the Federal debt as of December 1978; increased the estimated foreign holdings as of December 1984 and December 1989; and reduced the estimated holdings as of December 1994. As a result, the data on foreign holdings in different time periods are not strictly comparable, and the "borrowing" from foreign residents in 1979, 1985, 1989, and 1995 reflects the benchmark revision as well as the net purchase of Federal debt securities. A conceptual revision increased the estimated foreign holdings as of 1999, and the "borrowing" from foreign residents in 1999 reflects this revision as well as the net purchases of Federal debt securities.

assets. The foreign purchases of Federal debt securities do not measure the full impact of the capital inflow from abroad on the market for Federal debt securities. The capital inflow supplies additional funds to the credit market generally, and thus affects the market for Federal debt. For example, the capital inflow includes deposits in U.S. financial intermediaries that themselves buy Federal debt.

### **Federal, Federally Guaranteed, and Other Federally Assisted Borrowing**

The effect of the Government on borrowing in the credit market arises not only from its own borrowing to finance Federal operations but also from its assistance to certain borrowing by the public. The Government guarantees borrowing by private and other non-Federal lenders, which is another term for guaranteed lending. In addition to its guarantees, it has established private corporations called "Government-sponsored enterprises," or GSEs, to provide financial intermediation for specified public purposes; it exempts the interest

on most State and local government debt from income tax; and it insures the deposits of banks and thrift institutions, which themselves make loans.

Federal credit programs and other forms of assistance are discussed in chapter 9, "Credit and Insurance." De-

tailed data are presented in tables at the end of that chapter. Tables 9–11 and 9–12 summarize GSE borrowing and lending.